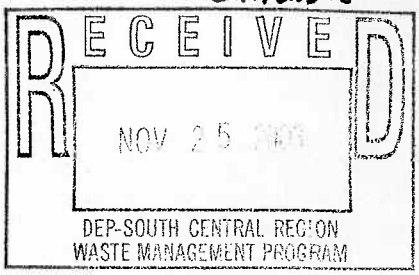
BT Fuze Trans
File - 3B
Lancaster Co.

communications

BT Fuze Products Division



November 24, 2003

PA Department of Environmental Protection
Bureau of Land Recycling and Waste Management
Southcentral Region
909 Elmerton Ave.
Harrisburg, PA 17110

Dear Sir or Madam:

Enclosed is the Notification of Hazardous Waste Permit-By-Rule Activity for BT Fuze Products Division of L-3 Communications Corporation at 103 N. Queen Street, Lancaster, PA.

We have a wastewater pretreatment system that treats the rinses and solutions from our Chemistry Laboratory and Metal Finishing Department prior to discharge of the effluent to the City of Lancaster sewer system (POTW). We have an Industrial Waste Discharge Permit issued by the City for this.

The system uses both elementary neutralization and wastewater treatment processes. A list of the sources of the wastewaters that are treated along with a description of the treatment process are attached. This system has been in place since 1981.

Please feel free to contact me if you have any questions.

Sincerely,

Robin E. Thomas

Robin E. Thomas
Director, Environmental Compliance

P.O. Box 4648 • 101 North Queen Street • Lancaster, PA 17604-4648 • USA
(717) 735-0300

2510-FM-LRWM0053 Rev. 7/2003
Form

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

NOTIFICATION OF HAZARDOUS WASTE PERMIT-BY-RULE ACTIVITY

I. Installation's EPA I.D. Number PAR000504829

II. Name of Installation BT Fuze Products Division of L-3 Communications Corp.

III. Location of Installation

103 North Queen Street, Lancaster (Municipality (Township, Borough, City)) Lancaster (County)

IV. North American Industry Classification System (NAICS) Codes for the installation (six-digit number in order of priority)

1. 332993 Specify: Fuses ammunition manufacturing 2. _____ Specify: _____

3. _____ Specify: _____ 4. _____ Specify: _____

V. Type of Hazardous Waste Permit-by-Rule Activity (attach supporting narrative description)

☒ 1. Elementary neutralization unit - see definition of this term at 40 CFR §260.10 and applicable permit-by-rule requirements at 25 Pa. Code §270a.60(b)(1).

☒ 2. Wastewater treatment unit - see definition of this term at 40 CFR §260.10 and applicable permit-by-rule requirements at 25 Pa. Code §270a.60(b)(1)

☐ 3. Generator treatment in accumulation containers, tanks or containment buildings - see permit-by-rule requirements at 25 Pa. Code §270a.60(b)(2). ***NOTE:*** *An individual permit will be required for a treatment activity that is regulated by standards in addition to those applicable to generator accumulation units (e.g., thermal treatment).*

☐ 4. Treatment of spent, lead-acid batteries at a battery manufacturing facility prior to their reclamation - see permit-by-rule requirements at 25 Pa. Code §270a.60(b)(3).

☐ 5. Treatment of hazardous waste onsite, at the site where it is generated, prior to reclamation of the hazardous waste at that site - see permit-by-rule requirements at 25 Pa. Code §270a.60(b)(4).

☐ 6. Treatment of recyclable materials (hazardous wastes that are recycled) to make the materials suitable for onsite or offsite reclamation of economically significant amounts of any precious metal identified in 40 CFR Part 266, Subpart F - see permit-by-rule requirements at 25 Pa. Code §270a.60(b)(5).

VI. Existing Environmental Permits

A. NPDES (Discharges to Surface Water) _____

B. UIC (Underground Injection of Fluids) _____

C. RCRA (Hazardous Waste) _____

D. PSD (Air Emissions from Proposed Sources) _____

E. Municipal Waste (As defined in Act 97) _____

F. Residual Waste _____

G. Other Permits

City of Lancaster Industiral Waste Discharge Permit #1020 (Specify)

BT Fuze Products Division of L-3 Communications Corporation

The waste water treatment system is as follows:

CHROMIUM WASTES (from chromate conversion coating processes)

- collected in the chromium sump and pumped through reduction tank where sulfuric acid and sodium metabisulfite are added by meter pumps controlled by pH and ORP controllers.

ACID/ALKALINE WASTES

- collected in the acid sump and pumped to the pH adjustment tank where the flow combines with the reduced waste flow from the chromium reduction tank. The pH is raised using sodium hydroxide. Meter pump adding sodium hydroxide is controlled by pH controller.

Flow from the pH adjustment tank passes into the main sump, a large equalization tank which contains an air mixer. The tank periodically pumps down to the clarifier. The main sump also collects periodic backwash water from the media filter which polishes the final effluent.

The flow from the main sump to the clarifier is dosed with anioic polymer just before it enters the flocculation chamber on the clarifier. Slow mixing produces the sludge floc which settles in the main section of the clarifier.

The sludge is withdrawn by pump from the clarifier bottom to a holding tank where it can be gravity thickened. Supernate from sludge thickening is returned to the main sump. The sludge is then pumped to a larger holding tank near the filter press where it is accumulated until it is processed in the press. Dewatered filter cake is collected into one cubic yard palletized boxes. It is sent to a licensed TSD facility for disposal as a hazardous waste.

The effluent in the clarifier passes upward through slant tubes, over a weir, and into the media filter compartment which filters out any remain floc. The effluent is then pumped to the sewer. Some of the effluent is collected for backwashing the media filter.

BT Fuze Products, a Division of L-3 Communications Corporation

PROCESS WASTEWATERS TREATED BY WASTEWATER PRETREATMENT SYSTEM:

FROM CHEMISTRY LABORATORY:

Rinse waters from metal finishing processes:

- Electro-cleaner rinses
- Acid activation rinses
- Nickel plating rinses
- Gold plating rinses
- Copper plating rinses
- Tin plating rinses

Rinse water and cleaning solutions from ultrasonic cleaning processes:

- Surfactant/soap cleaning solutions
- Occasional alkaline cleaning solutions

Rinse water from cleaning laboratory glassware
Spent acid solutions
Very infrequently, spent plating baths
Waste analytical solutions and metal finishing samples

FROM METAL FINISHING DEPARTMENT:

Rinse waters from metal finishing processes:

- Various alkaline soak cleaners
- Chromate coating
- Occasional zinc plating
- Occasional electroless nickel plating
- Passivating
- Chemical polishing aluminum
- Acid and alkaline cleaning

Rinse water and cleaning solutions from ultrasonic cleaning processes:

- Surfactant/soap cleaning solutions
- Occasional alkaline cleaning solutions

Spent acid solutions
Very infrequently, spent plating baths

FROM SECOND FLOOR NU/CLEAN INLINE CIRCUIT BOARD CLEANER:

- Twice a year, water from inline cleaner is dumped when the machine is cleaned